

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G02F1/1343 G02F1/133

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G02F H01C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 106 858 A (DARGENT BRUNO ET AL) 15 August 1978 (1978-08-15) column 3, line 38 - column 7, line 19; figures 3,4,7	1-4,6,7, 9-15,17
Y	-----	5,8
Y	US 3 675 988 A (SOREF RICHARD A) 11 July 1972 (1972-07-11) column 10, line 13 - column 11, line 25; figures 18,19	5
Y	----- PATENT ABSTRACTS OF JAPAN vol. 0120, no. 68 (P-672), 3 March 1988 (1988-03-03) & JP 62 209412 A (JIESU:KK), 14 September 1987 (1987-09-14) abstract ----- -/--	8

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

19 October 2004

Date of mailing of the international search report

24/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Cossu, A

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	YE M ET AL: "DRIVING OF LIQUID CRYSTAL LENS WITHOUT DISCLINATION OCCURRING BY APPLYING IN-PLANE ELECTRIC FIELD" JAPANESE JOURNAL OF APPLIED PHYSICS, PUBLICATION OFFICE JAPANESE JOURNAL OF APPLIED PHYSICS. TOKYO, JP, vol. 42, no. 8, PART 1, August 2003 (2003-08), pages 5086-5089, XP001191433 ISSN: 0021-4922 page 5087 - page 5089; figure 3	1-4,6,7, 9-17
P,Y	-----	5,8
Y	NOSE T ET AL: "Optical properties of a liquid crystal microlens with a symmetric electrode structure" JAPANESE JOURNAL OF APPLIED PHYSICS, PART 2 (LETTERS) JAPAN, vol. 30, no. 12B, 15 December 1991 (1991-12-15), pages L2110-L2112, XP002301135 ISSN: 0021-4922 Par. 1, Introduction; par. 4, Conclusions.	5
X	US 4 802 744 A (ENARI MASAHIKO ET AL) 7 February 1989 (1989-02-07) column 3, line 25 - line 30 column 5, line 23 - line 61; claim 1; figures 3,4	15
A	-----	1-4,6,7, 10,14
P,A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) -& JP 2004 004616 A (JAPAN SCIENCE & TECHNOLOGY CORP), 8 January 2004 (2004-01-08) abstract paragraph '0046! - paragraph '0054!; claims 5-7	1-7, 10-15,17
A	US 5 596 430 A (HASEGAWA MASAKI ET AL) 21 January 1997 (1997-01-21) column 3, line 55 - column 7, line 67; figures 1,2 ----- -/--	1-17

INTERNATIONAL SEARCH REPORT

Internal Application No
PCT/IB2004/051345

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	VAN DEN BROEK J J ET AL: "Metal film precision resistors: resistive metal films and a new resistor concept" PHILIPS JOURNAL OF RESEARCH, ELSEVIER, AMSTERDAM, NL, vol. 51, no. 3, 1998, pages 429-447, XP004129318 ISSN: 0165-5817 the whole document -----	12
A	EP 0 440 144 A (SANYO ELECTRIC CO ; TOKYO SANYO ELECTRIC CO (JP)) 7 August 1991 (1991-08-07) column 4, line 10 - column 7, line 12 -----	13
A	MAROTTA V ET AL: "Indium and tin oxide multilayered thin films as gas sensors based on reactive pulsed laser deposition" PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING SPIE-INT. SOC. OPT. ENG USA, vol. 4070, 2000, pages 338-344, XP002301136 ISSN: 0277-786X Par. 3.3; fig. 4 -----	10,11,14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/051345

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4106858	A	15-08-1978	FR 2349849 A1 DE 2719059 A1 JP 52133229 A	25-11-1977 10-11-1977 08-11-1977
US 3675988	A	11-07-1972	CA 934865 A1 DE 2058007 A1 FR 2068632 A5 GB 1331940 A	02-10-1973 27-05-1971 27-08-1971 26-09-1973
JP 62209412	A	14-09-1987	JP 1633718 C JP 2061014 B	20-01-1992 18-12-1990
US 4802744	A	07-02-1989	JP 2505744 B2 JP 62239127 A JP 2520599 B2 JP 62276525 A JP 2505751 B2 JP 62299945 A	12-06-1996 20-10-1987 31-07-1996 01-12-1987 12-06-1996 26-12-1987
JP 2004004616	A	08-01-2004	NONE	
US 5596430	A	21-01-1997	JP 7064123 A	10-03-1995
EP 0440144	A	07-08-1991	DE 69113644 D1 DE 69113644 T2 EP 0440144 A2 JP 6095161 A US 5164850 A JP 3011488 B2 JP 4253034 A	16-11-1995 30-05-1996 07-08-1991 08-04-1994 17-11-1992 21-02-2000 08-09-1992